

APPENDIX A: CLEAN COPY OF AMENDED PARAGRAPHS

[0013] FIG. 2a and FIG. 2b illustrate detection of blood plasma β -catenin RNA from patients for colorectal adenoma using RT-PCR.

[0014] FIG. 2c illustrates detection of blood plasma β -actin RNA from patients for colorectal adenoma using RT-PCR. FIG.2d and FIG.2e illustrate detection of plasma β -catenin and β -actin RNA from healthy individuals using RT-PCR.

[0031] PCR analysis was first performed with serum DNA samples extracted from colorectal carcinoma patients. The results showed that a 359 bp band was observed in all 15 serum DNA samples. Ten patients were tested with confirmed adenoma ranging from mild to severe dysplasia. A positive band was detected in 9 of 10 patients. The detection rate was 90%. The only negative case was amplifiable as it yielded positive 156 bp band after amplification with RET specific primers. PCR amplification of β -catenin was also performed on 10 healthy volunteer controls. None of the serum samples showed positive signals for β -catenin, while positive signals were clearly detected using RET specific primers. In addition, a known positive carcinoma serum sample was carried out in parallel and showed typical 359 bp band on the agarose gel (data not shown). These results demonstrate the ability of β -catenin to accurately detect colorectal carcinoma and adenoma.